



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/530,814   | 10/05/2006  | Henri Drean          | 5637                | 4412             |
| 26/936 7590 02/18/2010<br>SHOEMAKER AND MATTARE, LTD<br>10 POST OFFICE ROAD - SUITE 100<br>SILVER SPRING, MD 20910 |             |                      |                     |                  |
| EXAMINER   |             |                      |                     |                  |
| ALEMU, EPHREM  |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 2821   |             |                      |                     |                  |
| MAIL DATE  |             | DELIVERY MODE        |                     |                  |
| 02/18/2010   |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/530,814

**Applicant(s)**

DREAN, HENRI

**Examiner**

Ephrem Alemu

**Art Unit**

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 33-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33, 34, 41 and 42 is/are rejected.
- 7) ☒ Claim(s) 35-40 and 43-52 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date 12/14/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

2. Claims 36, 37, 44, 45, 49, 50 and 51 are objected to because of the following informalities:

Re claims 36 and 37, line 1, "claim 33" should be replaced with --claim 35-- and/or corrected appropriately to eliminate lack of antecedent basis.

Re claims 44, 49 and 50, line 1, "claim 41" should be replaced with --claim 45-- and/or corrected appropriately to eliminate lack of antecedent basis.

Re claims 45 and 51, line 1, "claim 41" should be replaced with --claim 43-- and/or corrected appropriately to eliminate lack of antecedent basis. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 41-42 and 33-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Patrick et al. (US 5,474,648).

Re claim 41, Patrick discloses a plasma-generating device (104) for treatment of a gaseous medium, comprising a control device (204) and a powering system (102) connected to the control device, and a detection device (not shown) for detecting a level of contamination of said gaseous medium (Col. 6, lines 61-64), wherein an electric signal of the plasma-generating device is modulated by the control device (204), according to the level of contamination detectable by the detection device (not shown) (Figs. 2A, 2B; Col. 5, line 54- Col. 6, line 23; wherein the electrical signal is chosen from the group consisting of the alternating voltage being supplied to at least one pair of plasma electrodes, the current, or combinations thereof).

Re claims 33 and 34, given the control circuit as discussed above in claims 41-42, the method for controlling the power factor of a power supply line as claimed in claims 33 and 34 is inevitable.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patrick et al. (US 5,474,648).

Re claim 52, although Patrick does not show the detection device being at least one manual or automatic probing device, it would have been deemed obvious to one having ordinary skill in the art the detection device being at least one manual or automatic probing device for no other reason than providing information concerning the presence of the various type of

contamination for the purpose of modulating the electric signal of the plasma-generating device according to the level of contamination detectable by the detection device (Figs. 2A, 2B; Col. 5, line 54- Col. 6, line 23).

***Allowable Subject Matter***

7. Claims 43 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. Claims 44-52 and 36-40 are objected to as being directly or indirectly dependent upon objected claims 43 and 35.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Crowe et al. (US 7,192,553); Campbell et al. (US 5,650,693); Bennett et al. (US 5,367,139); teach similar inventive subject matter.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EA  
2-13-10

/Douglas W Owens/  
Supervisory Patent Examiner, Art Unit 2821  
February 16, 2010